DOCUMENT RESUME

ED 219 084 IR 050 067

AUTHOR	Sundstrom, Grace, Ed.
TITLE	Selection. ERIC Processing Manual, Section III.
INSTITUTION	Educational Resources Information Center (ED/NIE), Washington, DC.; ERIC Processing and Reference Facility, Bethesda, Md.; ORI, Inc., Bethesda, Md. Information Systems Div.
SPONS AGENCY	National Inst. of Education (ED), Washington, DC.
PUB DATE	Oct 80
CONTRACT	400-81-0003
NOTE	40p.; Loose-leaf, updated continuously. One module of the ERIC Processing Manual (IR 050 065).
AVAILABLE FROM	ERIC Processing and Reference Facility, 4833 Rugby Ave., Bethesda, MD 20814 ($3.75).
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Databases; Documentation; *Evaluation Criteria; *Library Material Selection; Publications; *Quality Control; Reprography
IDENTIFIERS	*ERIC

ABSTRACT

Rules and guidelines are provided governing the selection of documents and journal articles to be included in the ERIC database. Selection criteria are described under the five headings: (1) Appropriateness of content/subject matter; (2) Suitability of format, medium, document type; (3) Quality of content; (4) Legibility and reproducibility; (5) Availability. It is emphasized that quality of content is ERIC's single most important selection criterion. Various types of documents are listed and grouped, for selection purposes, under the headings "Most Suitable," "Acceptable," "Unsuitable." Possible actions to remedy physical problems with otherwise acceptable documents are described. Factors to be considered when selecting documents of the following special types are covered in detail: dissertations and theses; brief materials; corporation-produced materials; bibliographies; documents that cannot be reproduced; documents of local/parochial interest; instructional materials (for student or teacher); research reports. A special section deals with the selection of journals for coverage and the selection of journal articles from journals not covered comprehensively. (TB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED219084

IR 050 067

ERIC®

PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection, and Technical Processing of Documents and Journal Articles by the Various Components of the ERIC Network

SECTION 3: SELECTION

October 1980

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

Section III: Selection

SELECTION

TABLE OF CONTENTS

	PAGE
Summary of Significant Rules	iii
III. SELECTION	
A. Introduction	III- 1
B. Scope of Interest (Subject Matter)	III- 2
1. Education as a Subject Versus the Subject Matter of Education	III- 2
2. Overlapping Subject Matter	III- 3
C. Types of Documents	III- 5
1. Most Suitable	III- 5
2. Acceptable	III- 6
3. Unsuitable	III- 7
D. Quality of Content	III- 8
1. Contribution to Knowledge; Significance	III- 8
2. Relevance	III- 9
3. New Applications of Knowledge; Innovative Practices	III- 9
4. Effectiveness of Presentation; Thoroughness of Reporting	III-10
5. Responsiveness to Current Priorities	III-11
6. Timeliness	III-11
7. Authority of Author, Source, Sponsor	III-11
8. Audience; Comprehensiveness	III-12
E. Legibility and Reproducibility	III-12
1. General	III-12
2. Physical Characteristics of Documents Which Present Reproduction Problems	III-13
a. Type Size	III-13
b. Broken Type/Faint Type/Smudged Type	III-13
c. Colored Papers or Inks	III-14
d. Translucent Paper	III-14
e. Photographs	III-15
f. Handwritten Documents (Holographs)	III-15
g. Missing Pages/Pagination Problems	III-15

PAGE

h. Blank Pages III-16
i. Undersize Pages (Within Regular Size Documents) III-16
j. Oversize Pages (Within Regular Size Documents) III-16

3. Document Preparation (Remedial Actions to Physical Document Problems) III-17

F. Availability III-18

G. Factors to Le Considered in Selecting Certain Types of Documents III-19

1. Dissertations and Theses III-19
2. Brief Materials (5 pages or less) III-20
3. Corporation-Produced Materials III-21
4. Bibliographies III-22
5. Level 3 Documents (Documents that Cannot be Reproduced) III-23
6. Documents Containing Materials of Local/Parochial Interest III-25
7. Instructional Materials (For Student or Teacher) III-26
8. Research Reports III-28

H. CIJE Selection III-31

1. Introduction III-31
2. Selection of Journals III-31
3. Selection of Articles Within Journals III-32
4. Procedures for Recommending New Journals to be Considered as Candidates for CIJE III-32
5. Journal Article Legibility and Availability III-33

LIST OF ILLUSTRATIONS

Figure III-1: ERIC Document Transfer Form III- 4

SELECTION

SUMMARY OF SIGNIFICANT RULES

1. All documents selected for announcement in RIE and inclusion in the ERIC data base must have a demonstrable connection with and relevance to the field of education, and to the areas covered by the various ERIC Clearinghouses.

2. Documents acquired anywhere in the system are transmitted on the basis of subject matter to the appropriate ERIC Clearinghouse for processing. Topics not previously included in Clearinghouse scope of interest statements must be allocated as they arise. Scope of interest statements must be constantly revised in order to include any new topics assigned to Clearinghouses.

3. At least one subject-matter specialist (and preferably more) should be involved in the selection process at each Clearinghouse.

4. Quality is the single most important selection criterion. Quality is a composite factor made up of several more specific characteristics, e.g., contribution to knowledge, significance, relevance, newness/innovativeness, effectiveness and thoroughness of presentation, relation to current priorities, timeliness, authority of author, size of audience, etc.

5. Document types have been sorted into three groups: most suitable (for RIE), acceptable (if exemplary), unsuitable. To be selected for RIE, documents must be one of the first two types. For example, research reports are "most suitable," dissertations are "acceptable," non-print materials are "unsuitable."

6. To be selected for RIE, documents must be legible and reproducible. If a document has defective pages, they must either be corrected, or judged not to seriously affect the content of the document, before that document can be selected.

7. Documents that are selected for RIE even though they contain physically illegible or non-reproducible pages (or parts of pages), must bear the legend "BEST COPY AVAILABLE."

8. All documents selected for RIE must be available either from EDRS or from an outside source whose name and address can be cited. Documents that cannot be made available to users should not be selected and announced in RIE.

9. Documents about education and its many associated processes, but not designed for use in an educational context, are desirable documents for ERIC. Documents about a disciplinary or subject-matter area, but not specifically designed for educational use, should have the link to education explicitly drawn in order to be selected.

10. Document preparation activities should be engaged in whenever possible to remedy physical defects that might otherwise disqualify good documents.

11. Selection of brief materials (5 pages or less) for RIE must be reviewed and approved by the Clearinghouse Director.

12. Documents that cannot be reproduced and made available via EDRS (i.e., Level 3 documents) are permissible, but policy is to keep their numbers low. They currently amount to around 5% of any given issue of RIE.

13. Corporation-produced materials must be screened to ensure that they contain valid information for practical use and not just advertising or propaganda.

14. Selection of journal articles for CIJE is based primarily on selection of the journals in which the articles appear. Some journals are selected for comprehensive, cover-to-cover, handling (i.e., all articles are covered). Some journals are designated for selective handling (i.e., only education-related articles are covered).

III. SELECTION

A. Introduction

Documents acquired as candidates for possible announcement in RIE must be subjected to a set of rigorous selection criteria to determine their proper disposition. Although in many cases documents are originally acquired selectively, in most cases the decisions of acquisitions staff are made in the absence of the actual document, and necessarily preliminary to the final selection process. It is the objective of this section to establish standards for judging a document in hand as to the following factors:

- Appropriateness of content/subject matter (to the field of education/scope of Clearinghouse);
- Suitability of format, medium, document type;
- Quality of content;
- Legibility and reproducibility (physical characteristics);
- Availability.

A document meeting the criteria in each of these five areas would be selected for processing and eventual announcement in RIE. A document not meeting the criteria would either be discarded or may occasionally be retained for local collection use. (NOTE: Local collections are not funded by ERIC.)

Failure to satisfy criteria in any one of the areas may be grounds for rejection. Nevertheless, *so important to ERIC is the quality of the permanent data base formed from these documents that "Quality of Content" should be regarded as the most important area.* A document may satisfy all other criteria, but if the quality is not sufficient it should be rejected. Conversely, a very high quality document may lead selection personnel to override certain problems in legibility, availability, or document type.

Throughout the selection process, the broad range of RIE's audience and the potential users of ERIC materials should be kept in mind. These varied groups encompass many levels of sophistication and represent many different viewpoints. The groups include:

- Educational practitioners (teachers, trainers, therapists, etc.);
- Administrators (principals, superintendents, deans, etc.);
- Policy makers (legislators, community leaders, school board members, etc.);

- Program planners;
- Researchers and scholars;
- Librarians, information and media specialists (including television, computer, audiovisual specialists);
- Counselors;
- Parents;
- Students (at all levels).

The selection process is a Clearinghouse responsibility and may be performed by Clearinghouse staff, Clearinghouse Advisory Board members, or specialists engaged from the field by Clearinghouses to make evaluations and decisions. A multi-person screening committee may be used and is highly recommended. In any case, at least one of the screeners employed should be a subject-matter specialist. Useful recommendations on specific documents may be found in reviews and commentary in published sources and may assist evaluators in the selection process.

Selectors should be thoroughly familiar with the ERIC data base, the ERIC indexing vocabulary, and the mandated scope of interest of the Clearinghouse involved. All selectors should, of course, maintain an on-going awareness of important developments in the particular sector of the field of education covered by their Clearinghouse. Written guidelines for use by selection personnel, and an evaluation form on which they can record recommendations, should be considered in some environments.

The selection of journal articles for announcement in CIJE is subject to somewhat different rules than those for documents because of the interest in covering certain journals comprehensively rather than selectively. See Section III.H for these details.

B. Scope of Interest (Subject Matter)

All documents selected for RIE must pertain in some way to the field of education (and in particular to the areas covered by the Clearinghouses). In the ERIC system, education is subdivided into sixteen major areas with a Clearinghouse in charge of each area. The areas of interest of each Clearinghouse are individually defined in the ERIC *Clearinghouse Scope of Interest Guide* (see Appendix A). The best available definition of the overall field of education for use in these selection criteria is, therefore, the combination of the Clearinghouse scope of interest statements.

1. Education as a Subject Versus the Subject Matter of Education

Education and its many associated processes, such as learning, teaching/instruction, administering, research, etc., are topics that may be dealt with by documents. Examples of such directly education-related topics are school budget management, teaching mathematics,

evaluation of student performance, etc. Documents dealing with such topics are of prime interest to ERIC, in both the acquisitions and selection processes.

A second type of document is not concerned with education per se or the educational process, but rather with its content, i.e., what is taught. Furthermore, this type deals with a topic in a way explicitly intended to be used in a formal educational setting (e.g., a chemistry class laboratory manual). Such documents are specifically designed for use by educators or students, mostly in schools, but clearly to facilitate a learning situation of some kind. Such documents are also of interest to ERIC, though there should be some effort to avoid the repetitive input of essentially the same curriculum materials in different guises.

A third type of document deals with a discipline-oriented topic, but it has not been specifically designed for use in an instructional setting. Such subject-content focused materials present a selection problem. It can be argued that the point of creating documentation of any type is ultimately to use it for educational purposes, and yet *ERIC obviously cannot try to serve as a data base for all knowledge or for any document that might by any stretch of the imagination be used by educators or in an educational context.* This third type of document must, therefore, necessarily be assigned a lower priority than the first two types; however, Clearinghouses may judiciously select documents closely related to their scope of interest (but not specifically tied to education) *if* the material is of demonstrable potential utility to the users. Only the highest quality subject matter documents, representing basic curriculum areas, should be selected and only when their potential value to users can be clearly projected. *If possible, potential value should be explicitly described in the document abstract.*

2. Overlapping Subject Matter

Most documents that are education-related fall unambiguously within the scope of single Clearinghouses. When a document overlaps the scope of two or more Clearinghouses, the Clearinghouses involved must negotiate to determine which one will most appropriately process and input the material. (See Section II.) When one Clearinghouse finds itself in possession of a document which falls within the scope of another Clearinghouse, the document should be transferred promptly and directly to the appropriate Clearinghouse. For this purpose, the Facility provides the *ERIC Document Transfer Form* (EFF-70) (Figure III-1). If a document is transferred more than two times, its subject may be outside ERIC's area of interest. To assist Clearinghouses in transferring documents, the "Index" to the ERIC *Clearinghouse Scope of Interest Guide* may be consulted.

Documents that are extremely broad or basic in their coverage (e.g., *Education in the World Today*) tend to be assigned to the broader, non-subject-oriented Clearinghouses, i.e.:

ERIC DOCUMENT TRANSFER FORM

Date Received: _____ Date Transferred: _____

TO: ERIC/ _____

FROM: ERIC/ _____

The enclosed document(s) appear to be more within your scope than ours.

The document(s) were obtained by (check one):

___ solicited contribution
___ unsolicited contribution
___ staff contribution
___ ERIC Facility

Correspondence information is as follows: (check one):

___ all relevant material is attached
___ no relevant correspondence; however the name and address of the contributor or contact person is (if known):

_____
_____
_____

_____
Clearinghouse Contact Person

(EFF-70)

FIGURE III-1: ERIC DOCUMENT TRANSFER FORM

- Educational Management;
- Elementary and Early Childhood Education;
- Higher Education;
- Junior Colleges;
- Rural Education;
- Urban Education.

Specialized subject matter areas not specifically included in existing scope of interest statements (e.g., "aesthetic education") are generally assigned, via negotiation and general agreement, to the most likely Clearinghouse and the subject matter areas added to the scope of interest statement at the next revision. The intent is for the network of ERIC Clearinghouses to provide an "umbrella" encompassing the entire field of education, including new emphases, directions, and innovations.

C. Types of Documents

To aid in selecting documents appropriate for RIE, the many different document types have been subdivided into three categories:

- Most Suitable;
- Acceptable;
- Unsuitable.

1. Most Suitable

- Research and Technical Reports (experimental, basic, applied) (NOTE: See III.G.8.)
- Descriptions
  - ——Model Programs/Projects/Installations
  - ——Innovative Practices
  - ——Product Development (R&D)
  - ——Implementation and Dissemination Reports
- Evaluation and Study Reports
- Surveys and Statistical Reports
- State-of-the-Art Papers/Reviews
- Syntheses/Interpretations/Summaries
- Bibliographies, Discographies, Filmographies (preferably annotated) (NOTE: See III.G.4.)
- Conference Proceedings and Papers
- Congressional Hearings/Reports/Documents (NOTE: Not Bills)
- Position Papers
- Guidelines (See III.G.7.)
  - ——Curriculum Guides
  - ——Practical "How To" Guides
  - ——Teacher Guides
- Tests, Measurement, and Evaluation Instruments
- State Department of Education Reports

- Documents assigned "PRIORITY" status by Central ERIC (e.g., White House Conference documents)

All Clearinghouse products (Information Analysis Products, etc.) are to be classed as "Most Suitable" and put into RIE, with the following *exceptions*:

- products which are published in journals (including offprints/ reprints of these products)
- short, informal, on-demand bibliographies

One of the major functions of the ERIC data base is to make available NIE and OE contractor reports and other federally-funded education-related documents which might otherwise not be available to the public. Every effort is made to collect these reports, and it is intended that they be given special consideration in the selection process. The documents of state and local education agencies are also of major interest and should be given special attention. (See Section III.G.6.)

All serial publications and journal articles are generally regarded as appropriate for CIJE and not RIE (see Section III.H); however, the following exceptions are suitable:

- journal issues with a single overall theme, so that the issue constitutes, in effect, monographic treatment of the theme;
- conference proceedings (e.g., technical proceedings of annual meetings);
- yearbooks;
- serials of highly irregular publication or limited circulation, so that the issue constitutes, in effect, a unique item.

2. Acceptable

The following types of materials should be selected for RIE *only* when they appear to have *wide applicability* or when they are *exemplary products*:

- Standards and Regulations;
- Annual Reports;
- Fiscal Reports (must contain some substantive information);

- Personnel Policies, Recruitment Materials, Employment Agreements;
- Corporation-Produced Materials (see Section III.G.3);
- Materials Produced by Local Agencies (for documents containing primarily information of a local or parochial nature, however, see Section III.G.6).
- Speeches and Presentations;
- Brief Materials (5 pages or less) (See Section III.G.2.);
- Data Collection or Survey Instruments (by themselves);
- Books (commercial publications);
- Manuals;
- Directories (however, frequently reissued directories are unsuitable);
- Newsletters and Bulletins (professional and trade organization containing substantive material);
- Dissertations and Theses (see Section III.G.1).

3. Unsuitable

The following types of documents are considered as unsuitable for RIE. The reasons for unsuitability vary. Journal articles are handled by CIJE. Non-print materials are out-of-scope for physical reasons, but not necessarily substantive reasons. Flyers, brochures, and other ephemera are considered too transitory and without sufficient subject content. Bills, news releases, and interim progress reports are generally preliminary in nature and are later superseded by final documents. Any of the types of documents listed below should usually be rejected:

- Advertising and Promotional Materials;
- Broadsides, Posters;
- Catalogs (Commercial, curriculum);
- Bills (i.e., legislation in process);
- Fiscal Reports (with no substantive information);
- Flyers, Brochures, Ephemera;
- Interim or Preliminary Progress Reports (with no substantive information or that are expected to be superseded);
- Journal Articles (see Section III.H.3);
- News Releases;
- Drafts that will later be superseded;
- Announcements of funding opportunities;
- Non-Print Materials;
- Proposals.

D. Quality of Content

Documents selected for RIE should be of high quality, substance, and significance. The following characteristics all contribute to that elusive and subjective, but most important factor, *quality*. While every document should be examined for these desirable characteristics, not every document can be expected to manifest all features.

1. Contribution to Knowledge; Significance

Substantive contributions to educational knowledge should always be selected for RIE, especially when based on well-designed experiments or orderly collections of data. Research reports, in particular, should be examined in terms of:

- stated objectives;
- hypotheses tested;
- methodology, conclusions, and recommendations.

In order to determine educational significance, subject experts may be consulted, if necessary.

Works by the same author, or coming out of the same program, should be examined to determine if there are any significant new developments, data, or results being reported. It should be kept in mind that negative results may be as contributory as positive results. Likewise, evidence which challenges or contradicts existing knowledge or common opinion can be as useful, or more so, as that which confirms or merely extends what is already known.

The contribution or significance of a document may also be assessed in terms of its purpose. Documents may have large and important objectives where a small amount of new information may have a disproportionately large effect. They may also have very modest objectives, attempting to place one small brick in a very large foundation or structure, the outlines of which are just beginning to emerge.

Papers prepared for learned societies or other special interest groups (e.g., professional organizations) often reflect the moving edge of new research and explorations not yet reduced to formal exposition for purposes of publication.

Documents which the selector believes add to or enhance the knowledge base of the field, or which provide an impetus for further research or action, should be selected for RIE.

2. Relevance

Relevance in this context is defined as the extent to which the document deals with issues that are current, "alive," and of contemporary interest to the educational community.

- Are emerging professional interests and topics treated, e.g., bilingual education, women's equity, metric conversion, etc.?
- Does the document present work on the "frontier" knowledge area of a particular subject, e.g., environmental studies, energy sciences?
- Are answers offered to current social problems, e.g., parent involvement, mainstreaming?
- Does the document provide basic up-to-date and comprehensive background or reference information on a subject?
- Has inclusion of the document been indicated by leadership interest or request, e.g., practitioner-oriented materials?
- Does the document deal with future trends?

3. New Applications of Knowledge; Innovative Practices

There is always a need for documents that describe the application of tested or known methods to new areas or new problems. The selector might ask the following questions:

- Does the document present an older idea, treatment, or application in a new framework or from a new point of view?
- Does the document present a new idea, treatment, or application (perhaps in relation to an older problem)?
- Does the document substantiate or contradict information contained in earlier work?
- Does the document suggest new areas of research?
- Does the document present new hypotheses to be tested?

4. Effectiveness of Presentation; Thoroughness of Reporting

Though it may discuss a well-known subject, a document may add value because it presents the subject with exceptional clarity, vigor, or in particularly topical terms. It may present new insights, or show the subject in a new context, or in language or form particularly suited to the understanding of the *intended audience*. It is a disservice to users to select documents whose content is garbled or whose form places an unnecessary burden on the reader. Documents should be rejected if they:

- are poorly written;
- misuse the technical devices of their presentations;
- fail to provide sufficient information to judge or followup on the adequacy of their work, or
- offer conclusions which are not supported by data.

Thoroughness of reporting refers to the extent of necessary background information provided, level of technical detail presented, and substantiation given for statements made. The following questions might be asked by a selector:

- Is the premise or thesis or purpose stated clearly?
- Are stated goals met?
- Are the arguments developed logically and reasonably supported with facts and research, rather than opinion or conjecture?
- Are the procedures utilized described adequately enough to permit a later experimenter to duplicate them?
- Are data provided informatively as in tables, graphs, etc.?
- Are key bibliographic references included? Annotations?
- Are the data evaluated (rather than just presented) or is a future direction to evaluation of the data outlined?
- Is the text well written, and not ambiguous, unclear, or otherwise a bar to understanding?
- How does the document compare with others on the same topic? Individualistic or redundant and derivative?

- Does the document help to integrate the literature, e.g., by synthesizing the findings from various disciplines?

- Are addresses given for sources of materials cited?

5. Responsiveness to Current Priorities

Priorities are established by the governments and institutions responsible for the conduct of education. Priorities may be established at the national, regional, state, local, or professional level.

Documents dealing with priority issues should be given special consideration, especially those dealing with priorities, goals, and objectives established by the NIE. NIE priorities identify the urgent needs in American education and the areas most requiring beneficial change and innovation.

6. Timeliness

The document should be current in terms of the work being done in the area with which it is concerned. A large number of the candidates for RIE have a value that is in inverse proportion to their age. Every Clearinghouse should, therefore, process documents as quickly as possible and should discourage backlogs.

There is no age limitation for RIE candidates. However, because timely, up-to-date information is to be preferred, a high percentage of RIE accessions have been published within the five years immediately prior to announcement. Some older documents, considered as "classics" or "landmarks," may be considered for RIE; however, they would be the exception rather than the rule. The same would hold for documents whose significance is the part they form of the historical record, e.g., the official proceedings or recommendations of a board, commission, or major organization in the field.

7. Authority of Author, Source, Sponsor

Some authors and some organizations are established leaders in their fields and have so consistently contributed to the field that virtually anything they produce *merits close attention.* Selectors must, however, not fall into the trap of automatically and uncritically accepting everything from such sources.

8. Audience; Comprehensiveness

The broader and larger the audience for a topic, the more justification there is for selecting a document on that topic. Documents on extremely narrow and specialized topics with correspondingly small audiences must, conversely, be strong with respect to the other criteria to warrant selection. In other words, an otherwise marginal document may be selected on the basis of the large number of people known to be interested in its topic (high user demand) whereas a marginal document with a minuscule audience is in double jeopardy.

The large and varied RIE user group makes this a difficult criterion to apply. In addition, a stated ERIC objective is a comprehensive approach that leaves no topic totally unrepresented in the data base.

The selector must therefore strive to maintain a broad view, partial to no particular segment of the user group, and permitting the selection of documents potentially useful to any segment.

E. Legibility and Reproducibility

1. General

All Level 1 and 2 documents announced in RIE are converted into microfiche, which are disseminated to users on both a subscription and an on-demand basis. Level 1 documents are also made available to the public in paper (hard copy) reproduced from the microfiche. Documents with clean, crisp, unbroken type on a clear background make the best copies. All such reproduction work is performed by the ERIC Document Reproduction Service (EDRS) using the original documents collected by the Clearinghouses and forwarded to the ERIC Facility.

EDRS performs its work according to certain Government standards* and is contractually obligated to adhere to these standards in most situations. Any exceptions must be specifically granted by Central ERIC.

The section that follows is based on the more detailed text and examples in the *ERIC Document Reproducibility Guidelines* (November 1978), which should be consulted for all problems relating to reproducibility. The intent of this section is to describe the physical qualities that a document must have in order to be photographically reproduced onto microfiche and then paper copy. Since it is easier to state what can't be filmed rather than what can be filmed, the approach taken here provides criteria that will make a document illegible or non-reproducible. Documents falling into this class should be rejected. It is a disservice

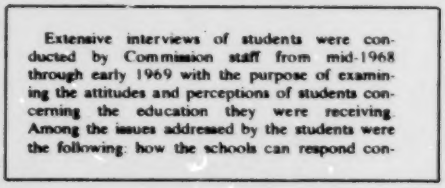
Basic U.S. Government Micrographic Standards and Specifications, National Microfilm Association, January 1972.

to inform the users of a document that they may pay to obtain and then cannot read adequately. *In all cases, the Clearinghouse should forward the best copy of the document available to it.*

2. Physical Characteristics of Documents Which Present Reproduction Problems

a. Type Size

Type size below 6-point can generally not be reproduced satisfactorily; 6-point type is difficult to read for any length of time or amount of material, even in a good quality original. To start with smaller than 6-point, and to go further generations of reproduction, is to generally degrade the material to the extent that it is unsatisfactory to the user. Material already reduced in the original document is particularly prone to falling below 6-point size and must be carefully examined.


Extensive interviews of students were conducted by Commission staff from mid-1968 through early 1969 with the purpose of examining the attitudes and perceptions of students concerning the education they were receiving. Among the issues addressed by the students were the following: how the schools can respond con-

6-Point Type

b. Broken Type/Faint Type/Smudged Type

Broken type is the consistent dropping of portions of the characters, e.g., the left side, the descenders, the top, etc. Keying or printing equipment out of adjustment is what generally causes broken type. While the broken type original may sometimes be readable because of faint impressions or "suggestions" on the paper, these traces are generally lost in filming, and the resultant copy can be of marginal readability to the user.

Faint or weak type can be the result of various factors ranging from an old typewriter ribbon with little ink remaining, to a poor printing job. Faint type can often be tested by attempting to photocopy (e.g., Xerox) the original. If there is a firm enough image to derive a readable copy on an office photocopier, then the chances are the document can be filmed adequately. If the copy is too poor, however, the document should be considered not-reproducible.

Smudged type has either had the original character images spread or dispersed around themselves, thereby confusing their nature, or it is the victim of an overprinting of other characters.

c. Colored Papers or Inks

Colored paper or inks do not, of course, reproduce in their original color, and they do affect the quality of the black and white film image. Documents depending on color to transmit meaning (e.g., a document portraying colored spectrum lines, paint samples, textile swatches, different colored graph lines, anthropological skin color description standards, etc.) are better entered at Level 3, if possible, with the user referred to a source of availability of an original copy.

Documents printed via diazo and spirit duplicator techniques (e.g., Ozalid-blue-line process, Ditto, etc.), or in colored inks (e.g., blue, green, yellow, orange), will often not reproduce. The *ERIC Document Reproducibility Guidelines* should be referred to in order to determine which color combination will photograph adequately. Due to spectral color response differences, sometimes a color combination that will not photograph well can be adequately reproduced on an office copier. In such an instance, the copies should be substituted for the colored originals.

Black ink on an especially dark paper background (e.g., dark red, dark brown, dark green, dark blue, purple, etc.), or tone-on-tone printing, is frequently unsatisfactory. Many otherwise excellent documents make use of colored paper in whole or in part. If the paper is light colored and not dark (e.g., yellow, pink, light green, tan, etc.), the item can frequently be handled at Level 1. If the paper is medium dark, but there is still good contrast between the inked characters and the paper background, Level 2 may be necessary. If the document contains significant amounts of genuinely dark paper, Level 3 should be the choice.

Material that depends on gradations of shading, such as some types of bar graphs, will not generally reproduce so that the same differentiations can be made as in the original. Text which has been "highlighted" with colored inks or shading also reproduces poorly.

d. Translucent Paper

Documents printed on translucent paper, such as a thin onionskin, are not a problem unless there is print on both sides and both sides tend to "bleed" (i.e., to be seen simultaneously) and thereby interfere with each other.

e. Photographs

Photographs will not copy well unless screened at the time of filming. Photographs that are under-exposed or very stark or simple in their content will sometimes

reproduce reasonably well. Documents that depend largely or entirely on photographs to convey their message, if entered at all, are better entered at Level 3, with the user referred to a source of availability of an original copy.

If a document contains a significant number of photographs, and especially if the photographs are scattered throughout its length, rather than grouped in an Appendix, it is best to leave them in and note them in the Descriptive Note Field or in the Abstract, e.g., *"Contains 25 early photographs (with detailed captions and sources) of American Indians, which will not reproduce well."*

f. Handwritten Documents (Holographs)

Handwriting is more prevalent in educational documents than one might imagine. It rarely reproduces well because of the variability of the impression. In addition, most handwriting is highly idiosyncratic and takes on the properties of shorthand (i.e., characters are slurred, elided, or left out). Handwritten documents, or documents containing substantial handwritten material, should be avoided whenever possible.

g. Missing Pages/Pagination Problems

Every document selected for RIE must be checked not only to determine its correct pagination, but also to verify that there are not missing pages and that the pages that are there are in the proper sequence. Documents with pages out of sequence must be corrected before being transmitted to the Facility. Documents with missing pages should generally not be selected for RIE. An attempt should first be made to secure the missing pages and to insert them where they belong. Only if it can be demonstrated that the missing pages are not essential may the document be selected for RIE; in such cases, the missing pages must be noted in the Descriptive Note Field, and the document must be stamped "BEST COPY AVAILABLE."

h. Blank Pages

Completely blank pages contained in a document should not be filmed, even if they bear a page number in the original. The paginator's consecutive number stamp will provide one clue to the user that a page of the original was skipped deliberately. It would also be helpful (though not mandatory) if, in document preparation, a page following a blank page could be marked with the notice: *"The previous numbered page in the original document is blank."*

Occasionally a page will contain so little information (e.g., "Appendix A") that a document preparer is tempted to treat it as a blank page. This may be done, at the judgment of the document preparer, if the sparse information is repeated on the following page; however, as a general rule, it is best to convey to the user the entire original document, improving legibility where possible, and forewarning the user with appropriate cataloging notes, but *not* editing out entire pages.

i. Undersize Pages (Within Regular Size Documents)

Undersize pages, e.g.

- 3" x 5"
- 4" x 6"
- 6" x 9"

are not a filming problem as long as the text they contain is clear, legible, and no smaller than 6-point.

j. Oversize Pages (Within Regular Size Documents)

The ideal page size is 8½" x 11", standard letter size. Any page exceeding these dimensions is considered "oversize" and must be handled by one of four possible techniques:

- *document preparation*
  (re-arranging, trimming, cutting and pasting, re-typing, etc., in order to create one or more regular size pages from the oversize original)

- *increased reduction ratio (up to 29X)*
  (can be used to get legal size documents (8½" x 14" pages) into one frame. However, the entire document must be filmed at this ratio)

- *double-framing*
  (wide pages, up to 17" x 11", can be filmed right-reading across two microfiche frames)

- *overlapping images*
  (foldouts (or oversize documents) which exceed the limits that can be handled by the double-framing and increased reduction ratio, must be handled as a series of overlapping images; however, this technique is awkward for the user and reduces the utility of the document)

Detailed instructions concerning each of these techniques appears in the Manual in Section V. Oversize pages can be handled satisfactorily. Only the overlapping image technique creates some potential confusion to the user on the resultant microfiche.

3. Document Preparation (Remedial Actions to Physical Document Problems)

The mere presence in the document of one of the above undesirable physical characteristics is not sufficient to prevent selection. The physical problem must exist to an extent that materially affects the document. There are three possibilities:

a. The physical problem affects the document only slightly and need not be corrected.

In this case, the document may be selected for RIE. The problem may be noted in the Descriptive Note if desired, but this is not required except in the case of missing material. Examples of this type of problem might be:

- small type interspersed internally on a few pages or tables;
- a few photographs;
- a few pages with broken or otherwise poor type;
- a missing and unobtainable, but non-essential section or appendix (should be noted in the Descriptive Note).

b. The physical problem has a substantial effect on the document, but it can be corrected by the Clearinghouse itself.

In this case, the document should have the defect corrected if it is selected for RIE. (Major amounts of re-typing should be avoided, however.) Examples might be:

- illegible pages that can be re-typed;
- a graph dependent on color that can be re-labeled so as to be independent of color;
- material in excessively small type that can be re-typed, or even perhaps omitted, without detriment to the document;
- out-of-sequence material that can be re-sequenced.

c. The physical problem has a substantial effect on the document and requires going back to the source for remedial action.

In this case, the Clearinghouse should work with the source to correct the defect, if possible. Examples might be:

- extensive missing pages;
- extensive materials reduced below 6-point size;
- extensive illegible pages.

In some cases, sources have been willing to make available the original camera-ready copy in order to see that their document makes it into the ERIC system.

As a general rule, a document that has substantial physical defects should not be selected "as is" for RIE. Rare exceptions may occasionally be made in the case of unusually important and high quality documents that simply cannot be corrected, e.g.:

- the author is deceased;
- the source organization no longer exists;
- no other copies exist, etc.

Whatever the reason, if a physically defective document is selected for RIE, the document cover must be stamped "BEST COPY AVAILABLE" and should be entered at Level 2 (microfiche only). If the defect is serious, it should be noted in the Descriptive Note. If it is not appropriate to describe the defect specifically, the following general note should be placed in the Descriptive Note Field: *"Not available in paper copy due to marginal legibility of original document."*

PRIORITY documents transmitted from the Facility have generally been screened in advance for legibility and reproducibility before being sent to the Clearinghouses. If such a document bears the stamp "BEST COPY AVAILABLE," the possible sources of better copies have been exhausted.

F. Availability

Documents announced in RIE must be available either through EDRS (Level 1 or 2) or through an outside source whose name and address can be cited in the Availability Field (Level 3). ERIC does not wish to announce documents that the user cannot obtain in some way. Therefore, if a document cannot be reproduced and a source of availability cannot be found, it should not be selected for RIE.

The degree to which a document is readily available from sources other than ERIC can also affect the selection decision. ERIC recognizes a certain responsibility for the bibliographic control of fugitive materials in the field of education. If a document would probably not be available anywhere if not included in the ERIC data base, then there are stronger reasons for selecting it than there would be if it were available through regular publishing channels.

Documents which are commonly and easily available on a nationwide basis should generally be evaluated by selectors very strictly. It is unlikely that the use of such documents by the educational community depends on ERIC. They will be in many library collections and will therefore be frequently cited and readily consultable by users quite apart from any announcement in RIE. Unpublished papers and those having only local or specialized distribution should, on the other hand, be

evaluated more leniently. ERIC may be the only data base that has acquired the document and the only one in a position to preserve the document for future users.

G. Factors to be Considered in Selecting Certain Types of Documents

The preceding criteria pertaining to quality, reproducibility, and availability, apply equally across all documents being considered. Beyond these common selection criteria, however, there are some "considerations" that apply only to specific types of documents.

In this section, eight types of documents have been isolated from the "Most Suitable" or "Acceptable" categories, and a discussion for each type is provided that takes into account the special characteristics of that type and how they might affect selection decisions.

1. Dissertations and Theses

Acquisition of doctoral dissertations and masters theses on a systematic basis is not expected of the Clearinghouses, but such items are acceptable when they meet special criteria.

The majority of domestic doctoral dissertations are controlled by and announced in University Microfilms' *Dissertation Abstracts*. It is possible, therefore, to be very selective about dissertations that are candidates for RIE. In addition to the normal selection criteria, the following situations may be justification for including a dissertation in RIE:

- The university granting the degree does not participate in *Dissertation Abstracts*, e.g., Walden University, University of Chicago, Massachusetts Institute of Technology. (In the front of each issue of *Dissertation Abstracts* is a list of currently participating institutions.)

- The dissertation is of special importance to the area of education covered by the Clearinghouse and by its high quality would definitely enhance the ERIC data base.

Particularly significant dissertations that are in (or going in) *Dissertation Abstracts*, and that are also selected for Level 3 announcement in RIE, should provide ordering information in the Availability Field.

Dissertations that are *not* in (and not going in) *Dissertation Abstracts*, and that are selected for RIE, should be entered at the level granted by the author. If a dissertation, which is selected for RIE, gives a source of availability, but the author cannot be reached for a release, then the document may be announced at Level 3.

Masters theses are controlled and announced, on a more limited basis, via University Microfilms' *Masters Abstracts*. Masters theses (and research papers from fifth-year programs) may on an exception

basis be entered in RIE at Level 1 or 2; they must, however, be entered at Level 3 when announced in *Masters Abstracts* and available from University Microfilms.

(An alternative way of announcing dissertations has been adopted by one Clearinghouse. The Clearinghouse prepares bibliographies of dissertations focused on specific topics. Each bibliography contains citations for approximately 18 to 24 dissertations announced in *Dissertation Abstracts* during six-month time periods (January-June and July-December), and, with the permission of University Microfilms, includes the full DA abstract and ordering information. The bibliography is then entered at Level 1.)

2. Brief Materials (5 pages or less)

Brief materials consist of those documents of five or fewer pages, with the text containing 1,500 words or less.

Short documents can create user problems, and their entry into RIE should be kept to a minimum. Users may object (and have in the past) to paying full microfiche or paper copy prices for short documents when the documents do not contain much meaningful information. For these reasons, short documents selected for the ERIC system must be scrutinized with greater than ordinary care. They must be documents of high quality.

Although the considerations listed below are similar to selection criteria mentioned elsewhere, they are very important to emphasize in the selection of short documents.

- Synthesis of high quality information presented in a concise matter;
- Timeliness, uniqueness, and scholarly significance;
- Utility for users;
- Loss to the education field if not included in ERIC.

The following types of documents, which are sometimes brief in length, are usually acceptable if they meet the selection criteria above:

- Speeches;
- Tests, questionnaires, or evaluation instruments;
- Numerical/quantitative data compilations;
- Descriptions of promising practices.

The following types of documents, if in brief form, are in general *not* acceptable:

- Bibliographies;
- Opinion Papers.

NOTE: Central ERIC requires that all documents 5 pages or less in length be reviewed by the Clearinghouse Director and, if selected, bear an indication on the log form to show that it has been reviewed and approved.

3. Corporation-Produced Materials

"Corporate Materials" refers here to classroom materials produced by industry (e.g., Kodak, McDonald's, Kellogg, General Motors, J.C. Penney, etc.), trade associations, and public utilities. Corporate materials are generally inexpensive or even free. Environment, energy, and nutrition are common topics. Most materials treat the company's area of business. For example, Kellogg publishes materials with food-related information; General Motors publishes materials about the automobile; the utility companies write about energy issues, etc.

Corporate materials can be useful classroom resources if they are appropriate and *not unduly biased*. The production of classroom materials by industry, trade associations, and public utilities causes some concern that companies may be taking advantage of students as a captive audience in the classroom. There is a common belief that schools should be free from commercial exploitation. Therefore, such *documents need to be carefully scrutinized to see that they contain valid information for classroom use and not just advertising or propaganda.*

The following considerations should be weighed in the selection of such materials:

- Validity

  Avoidance of propaganda, of subtle biases toward the company or industry, and of telling just part of the truth when dealing with controversial issues.

- Accompanying Instructions

  Provision of adequate information and instructions to facilitate use in the classroom or other educational setting.

- Generalizability

  Generalizability of materials to other localities, states, and settings (for example, the materials should not be training materials designed specifically for one unique, small group or geographic setting, and not capable of replication.)

Selected materials should, as a rule, be put into ERIC at Level 1 or 2. Many corporate materials may consist of non-print media components such as posters, brochures, or films which are not appropriate to the ERIC system. If these components are essential to the meaning or usefulness of the materials, the materials should *not* be selected. Since the materials are generally designed to be eye-catching and attractive there may be special problems relating to reproducibility, such as color, size, etc. Corporate materials should meet all regular reproducibility guidelines.

4. Bibliographies

Bibliographies consist of lists of materials relating to a particular subject, author, or period. Bibliographies may cite books, films, and multimedia materials. They may or may not contain annotations or abstracts.

Bibliographies can be extremely useful to the user of ERIC when they are specific to a topic, contain sufficient information to enable a user to locate entries relevant to his/her needs, and provide complete bibliographic information.

The following list is intended to assist in the selection of bibliographies. Considerations under each of the major headings below are suggestive, not prescriptive, i.e., these are merely things to think about in the selection process as an item is compared to others like itself in order to judge the best quality materials:

- Purpose and Scope

  —Identification of purpose;

  —Indication of intent (exhaustive or selective, including basis of selection);

  —Statement of limitation (language, geographical boundaries, periods of time, or subject);

  —Creation of more than a mere list of titles.

- Organization and Arrangement

  —Inclusion of a Preface, Table of Contents, and Index;

  —Compilation in accordance with the stated purpose;

  —Explanation of special features;

  —Provision of clear, concise, and informative annotations or abstracts;

  —Usefulness, consistency, and suitability of the arrangement (alphabetical, classified, chronological, geographical, or a combination of one or more methods).

- Completeness of Bibliographic Information

  —Inclusion of complete bibliographic citations, including author, title, place, publisher, date, and pagination.

  —Accessibility, availability, and currency of the material;

  —Indication of grade level for which prepared, if appropriate.

- Authority of the Compiler

  —Professional bibliographer or subject specialist.

- Comprehensiveness/Length

  —Presentation of enough citations to make the document meaningful and useful.

  (NOTE: Short, informal, on-demand bibliographies, such as computer printouts of ERIC searches are *not* suitable for input to RIE and should be rejected.)

5. Level 3 Documents (Documents That Cannot Be Reproduced)

Level 1 documents are available from EDRS in both paper copy and microfiche. Level 2 documents are available in microfiche only. Level 3 documents are not available from EDRS, but *are* available from an external source (cited in the Availability Field).

Although every effort should be made to obtain reproduction releases, there remain some documents for which releases cannot be obtained. Commercial publishers and other organizations (such as UNESCO and the Council of Europe) may sometimes refuse to let ERIC reproduce their documents. In addition, some documents may not reproduce adequately in either microfiche or paper copy because of charts, photographs, colored pages and inks, or other physical characteristics.

Documents that cannot be microfiched and made available via EDRS have always been allowed into the ERIC system, but always at a low percentage rate. The reason for this restriction is that Level 3 documents can frustrate the user who is accustomed to finding RIE announcements in the ERIC microfiche collection. In addition, orders are often placed by librarians with EDRS without checking Level status; orders for Level 3's are, of course, returned unfilled. As a result, Level 3 documents are permitted

by ERIC sparingly (if they have a reliable source of availability that can be cited), but are not encouraged. Clearinghouses vary in their Level 3 input, but the overall system percentage is approximately 5% annually.

Because the volume of Level 3 documents is restricted, they must be subjected to more stringent selection criteria than regular documents. The following considerations might apply:

- Contains new information, or information that can fill a known gap in the data base;
- Provides detailed information on a subject not previously treated in depth, or provides a synthesis/overview of a topic in which the literature was previously scattered;
- Provides timely and current information, or information for which there is an active current demand;
- Provides exceptional, exemplary information of a level significantly higher in quality than other input;
- Provides information of special importance in the field or of historical significance ("landmark" documents);
- Prepared or published by an authoritative source and, therefore, is apt to receive significant attention and user interest.

In general, *documents that are available only from sources outside the United States* should not be considered for Level 3. Exceptions may be made for highly significant documents available from sources of known reliability (e.g., UNESCO). (See Section II.E.9 for the stringent selection criteria to be used for such documents.)

The following kinds of documents will occasionally require Level 3 processing:

- Books;
- Collected Works;
- Dissertations;
- Creative Works;
- Historical Materials;
- Non-Print Media;
- Reference Materials;
- Directories;
- Maps;
- Commercial Guides.

In citing the external source of availability it is necessary to include the full address and advisable to include the price, for the convenience of the user. If there is any question of availability,

the source should be checked. Documents soon to go out of print, or for which stocks are depleted or don't exist, should not be selected.

6. Documents Containing Material of Local/Parochial Interest

"Local" refers here to a limited geographic area. "Parochial" refers here to a narrow subject matter and correspondingly limited audience.

Documents containing substantial amounts of information of a local or parochial nature may come from any source, but are often produced by state and local education agencies.

Although ERIC serves many specialized audiences, most ERIC documents should be of interest to a fairly broad audience. Documents containing a substantial amount of local and parochial content are generally *not* desirable candidates for RIE and should be selected *only* if they also have some significance and utilization beyond the narrower confines, or are generalizable to other content areas.

Documents which occasionally fall into the local/parochial category are:

- Surveys;
- Historical Materials;
- Legal Materials;
- Directories of Local Services;
- Holdings Lists of Local Libraries.

Bibliographies may also verge on this category by focusing on local references, often difficult if not impossible to obtain outside the local area.

The following considerations should be kept in mind when evaluating documents containing local/parochial material:

- Usefulness at a Broader Level

  For example, the document could provide a model useful to educators in other districts developing similar programs. It could report a survey done at the local/state level, but generalizable to other areas. If a document is only about local issues, it should not be selected, but if the local issues are related to broader national issues, or if other locales are facing similar issues, it may be selected.

- Coverage of a Unique Subject Not Available in Other ERIC Documents

  For example, a document could offer historical information or survey information about an area which teachers elsewhere may use as resource material.

- Includes Information That Can Serve as a Base to Answer Common Requests

  For example, many teachers are interested in finding curriculum guides for the particular area/state in which they teach, or guides from other areas that they can adapt.

7. Instructional Materials (For Student or Teacher)

Designed for practical use by either student or teacher, these materials often have a component which includes instructions and/or activities. Materials falling into this category are:

- Curriculum Guides;
- Teacher Guides and Resources;
- Student Guides and Resources;
- Classroom Materials;
- Lesson Plans;
- Units of Study;
- Instructional Packages.

Teacher guides and resources include materials which can be used by the teacher for obtaining background knowledge, factual knowledge, awareness-raising, or "how-to" information. They often provide conceptual frameworks for teaching and specific strategies and activities for classroom use. Student resources are materials that students can use essentially without direction or intervention by the teacher.

Many of ERIC's users are practitioners who request materials to help them in their teaching. A major aim of the ERIC system is to provide a data base that includes sound student and teacher guides and resources.

The following list of factors is intended to assist in selection of student and teacher materials. The list is suggestive, not prescriptive. Good materials will encompass many of the factors; average materials will encompass a few; poor materials will exhibit none. An appraisal of these factors can contribute to making a better decision about whether to include the materials. As always selectors must use a holistic approach to document selection, attending both the ERIC guidelines and their own experience and expertise within their Clearinghouse scope.

It is *extremely important* that instructional materials be examined to avoid duplication of their information content. One state may publish an instructional manual consisting primarily of content derived from another state. It is, therefore, essential that the selector be a senior staff person who is knowledgeable about the scope of the Clearinghouse and the content of the existing data base.

- Organization

  —Ease of use;

  —Presence of a Table of Contents, Preface, Glossary, Index.

- Educational Objectives

  —Clarity of instructional goals, including both affective and cognitive objectives, whenever appropriate.

- Content

  —Accurate and valid presentation of information;

  —Complete information included without major omissions;

  —Inclusion of sound and substantive information;

  —Logical development of ideas;

  —Up-to-date illustrations.

- Teaching Strategies

  —Appropriate for target group;

  —Clarity of methodology;

  —Explicit identification of concepts;

  —Reflection of a variety of teaching/learning modes.

- Activities

  —Logical relationship between basic objectives and activities;

  —Appropriateness and relevance of a variety of activities to pupils' experiences, interests, levels of comprehension, and grade level.

- Stereotyping, Bias, and Social Inequity (selection should be sensitive to extremes)

  ——Whenever possible, avoidance of statements of bias and stereotyping concerning women and ethnic groups;

  ——Avoidance of references to the historical and/or current disadvantages of various groups;

  ——Promotion of mutual understanding and respect between races and ethnic groups;

  ——Fair treatment of people as individuals.

- Suitability of Materials for Learners

  ——Relationship of content to pupils' experiences, interest levels, levels of comprehension, age and maturation level;

  ——Suitability of vocabulary, sentence and paragraph structure, and concept level to the age group which will use the materials.

- Completeness of Bibliographic References

  ——Usefulness of information included in the bibliographic citations so that the user can obtain resource materials;

  ——Indication of grade level, if needed.

- Completeness

  ——Self-contained materials.

- Duplication of Materials Already in the ERIC Data Base

  ——Uniqueness relative to other materials already in ERIC, i.e., inclusion of new techniques or information on a needed or unique topic.

8. Research Reports

Good defines research as a "*...disciplined inquiry, varying in technique and method according to the nature and conditions of the problem identified, directed toward the clarification or resolution (or both) of a problem.*"

Webster defines research as "*...investigation or experimentation aimed at the discovery and interpretation of acts, revisions of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws.*"

Reprinted below are the characteristics of a good research report as conceived by the National Council of Teachers of Mathematics (*Criteria for Judging Research Reports and Proposals* - ED 138 469). Consideration of these factors may facilitate the selection of high quality research reports.

a. The Problem

(1) The problem is clearly stated, and the rationale is logical.

(a) The purpose is concisely stated.

(b) Objectives are specified.

(c) Procedures are specified.

(d) Variables are identified, and their relationship to theory or observation is explained (if the variables are new, then evidence from a pilot study is presented).

(e) Research hypotheses are concise.

(f) Research hypotheses are logically developed from some theory or related problem, and they are clearly plausible.

(2) The problem is significant.

(a) Its relationship to previous research has been well established.

(b) The hypothesized research findings should be generalized beyond the sample.

(c) The study will make a contribution to the advancement of knowledge.

(d) The results will contribute to the solution of some practical or theoretical problem.

b. Design and Procedures

(1) The design of the study is appropriate to the solution of the problem.

(a) The research design is fully developed.

(b) Assumptions are clearly stated.

(c) Delimitations are noted.

(d) The population and sample are described: geographic limits; time period covered; sociological description; sampling units.

(e) The sampling method is appropriate and practical.

(f) Controls for sources of error are described and are appropriate: sampling error; nonresponse; interviewer bias; response error; response set; experimentor bias; teacher effect; control of variables; extraneous factors.

(2) The relationship of the procedures to the implementation of the design is appropriate.

(a) The data-gathering methods are clearly described and meet the requirements of the problem.

(b) The obtained sample is of a sufficient size and is representative of the defined population.

(c) The measuring instruments are appropriate.

(d) The validity and reliability of the evidence are established, or a procedure for establishing the validity and reliability of the evidence is described.

c. Analysis and Conclusions

(1) The analysis of the data is appropriate.

(a) The results of the analysis are clearly represented.

(b) The analysis methods are valid, appropriate, and properly applied.

(c) The assumptions behind the statistical tests are stated, and the relationship of the test to the design is appropriate.

(2) The conclusions are reasonable.

(a) The conclusions are clearly stated.

(b) The conclusions are substantiated by the evidence presented.

(c) Interpretations and implications are impartial and scientific.

(d) A comprehensive discussion of the qualifications is given (methodological problems and errors, alternative explanations, other limitations).

(3) The research is adequately reported.

(a) The report is logically organized and clearly written.

(b) Grammar and mechanics are adequate.

H. CIJE Selection

1. Introduction

The *Current Index to Journals in Education* (CIJE) is a monthly index journal designed to announce and disseminate education-related information contained in the current periodical literature. CIJE is a companion journal to *Resources in Education* (RIE); between them they cover a large percentage of the total literature of the field. Approximately 780 journals are covered regularly by the ERIC Clearinghouses and are listed monthly in the "Source Journal Index" (appearing in each issue of CIJE). Journal articles processed by the ERIC system are processed for announcement in CIJE. The few exceptions (e.g., older articles more than two years old and no longer eligible for CIJE) are discussed in Section III.C.1.

2. Selection of Journals

The selection process for CIJE exercises its quality control primarily at the journal level. High quality education journals are pre-selected to be covered totally or comprehensively. All others are pre-selected to be covered selectively (but comprehensively for their education content). In general, therefore, the application of qualitative criteria is not as relevant in selecting individual journal articles for announcement in CIJE as it is in selecting individual documents for RIE. This is because CIJE was designed to cover *all* education-related articles in the journals that it formally states it will cover. It is useful to educators, and essential for librarians among others, to know and to be able to count on, for example, the fact that *all* articles appearing in a journal such as the *Harvard Educational Review* and *all* education-related articles appearing in important periodicals such as *Science*, will, without exception, be announced in CIJE.

Journals from which articles are derived for announcement in CIJE can be thought of as of three types:

- Education Journals

  Journals totally concerned with the field of education.
  Example: *Journal of Educational Research.*

- Education-Related Journals

  Journals that regularly and frequently contain articles bearing on education, but whose main focus is elsewhere:
  Example: *Journal of Applied Psychology.*

- Non-Education Journals

  Journals that occasionally, but infrequently, contain an education-related article.
  Example: *Science*.

3. Selection of Articles Within Journals

The selection of individual articles within formally covered journals on the "Source Journal Index" is guided by the following rules:

- Coverage of designated education journals must be "cover-to-cover." This is defined as comprehensive and complete article coverage, normally excluding, however, such items as book reviews, editorials, letters to the editor, newsletters, feature columns, schedules of events, advertising, articles of one page or less, etc.

- Articles in education-related journals are selected for inclusion in CIJE strictly on the basis of their relationship to the field of education. Articles not related to education are excluded, as are the miscellaneous types of material referred to above.

In addition to its regular journal article workload, derived from journals formally covered by CIJE, it is permissible for a Clearinghouse to input *any* good quality education-related article that may be detected in some other journal not regularly covered, e.g., the *New Yorker*. These are called colloquially, "oneshot" articles. It is not necessary to receive prior approval for "oneshots," but they should be identified as such by writing "oneshot" on both the top of the resume form and in the Comments block on the log sheet. It should be remembered, however, that the journal involved will *not* be listed in CIJE among those formally covered. In order to provide the user with means to obtain a copy of the article, if desired, it is necessary that the address of any small, obscure, or otherwise difficult to identify journal, be cited in the cataloging. This "oneshot" category is intended to be used on the *exception basis* (i.e., no more than one or two per month), for the occasional important article from a non-education journal. It is not intended as a preliminary step toward inclusion of the journal on the regular journal list; however, any journal that is repeatedly a source of "oneshot" articles, should be considered for possible regular formal coverage.

4. Procedures for Recommending New Journals to be Considered as Candidates for CIJE

Clearinghouses nominate appropriate journals for inclusion in the "Source Journal Index". New journals should be nominated by the Clearinghouse responsible for the subject area concerned for either cover-to-cover or selective processing. Central ERIC

approves or disapproves these nominations along with the CIJE Contractor on the basis of the overall size of the list.

If non-Clearinghouse components (e.g., Central ERIC, EDRS, ERIC Facility, Oryx Press) learn of new candidate journals, they should transmit the information to the appropriate Clearinghouse. If the original recipient cannot determine the appropriate Clearinghouse, the materials should be sent to the ERIC Facility's Acquisitions Department for this decision.

Given the large number of journals covered by CIJE, Clearinghouses should generally attempt to delete a marginal journal (e.g., less valuable content or irregular publication schedule) in order to add a significant new journal. The responsibility for making this decision belongs to the individual Clearinghouse. If, however, it becomes necessary in the opinion of the Clearinghouse to add one or more journals and not to delete any, justification should be submitted to Central ERIC which, in consultation with the CIJE Contractor, will make a decision in the matter.

5. Journal Article Legibility and Availability

Journal articles are not handled by the ERIC Document Reproduction Service (EDRS) and are therefore not reproduced by EDRS for users in either microfiche or paper copy. The articles announced in CIJE are available through the original journals themselves and through reprint services such as UMI and ISI. For these reasons, questions of legibility, color, page size, type point size, and reproducibility do not enter into either the selection process or the later cataloging process and need not be considered by the Clearinghouses.